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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,874	12/24/2003	Atsushi Sakai	Q78611	9363
23373	7590	09/02/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			XU, LING X	
			ART UNIT	PAPER NUMBER
			1775	

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,874

Applicant(s)

SAKAI ET AL.

Examiner

Ling X. Xu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 3, 6-11, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 12-13 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/303,728.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 8/30/2005
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2 and 12-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-26 of the copending Application No. 10/466,517 in view of Sato et al. (JP 04-094110, Translation included).

Claims 20-26 of the copending application recite a solid electrolytic capacitor comprising an aluminum foil and an electrically conducting polymer of a monomer compound containing a 5-membered heterocyclic ring represented by formula (I) as recited in claim 23 of the copending application. Formula (I) has the same structures as the compounds recited in claims 1-2 and 12-13 of the present application.

Claims 20-26 do not specify an oxide dielectric film formed between the metal anode and the electroconducting polymer and the use of the solution containing an oxidizing agent having a viscosity of less than 100cp in the formation of the oxide dielectric film.

Sato teaches a solid electrolytic capacitor comprising a dielectric thin film of oxide formed on the surface of the metal foil. Sato also teaches that a layer of solid electrolyte formed by oxidation polymerization of aromatic compound such as thiophene and their derivatives (page 9, line 11 of the translation) using low viscosity solution of oxidizer of 100 cp or less. The layer of solid electrolyte is formed on a surface of the dielectric thin film (abstract).

Sato also teaches that the use of the low viscosity solution of oxidizer provides the capacitor with improved high frequency characteristics (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art to add an oxide dielectric film between the anode and the electroconducting polymer layer in order to provide insulation function to the anode and the electroconducting polymer layer. It would have also been obvious to one skilled in the art to use low viscosity solution of oxidizer for formation of solid electrolyte layer in order to provide the solid electrolytic capacitor with improved high frequency characteristics.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-2 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (JP 04-094110, Translation included) in view of Jonas et al (US 4,910,645).

Sato discloses solid electrolytic capacitor comprising a dielectric thin film of oxide formed on the surface of the metal foil and a layer of solid electrolyte which is formed by oxidation polymerization of aromatic compound using low viscosity solution of oxidizer of 100 cp or less. The layer of the solid electrolyte is formed on a surface of the dielectric thin film (abstract).

Sato also discloses that aromatic compound may be thiophene and their derivative (page 9, line 11 of the translation).

Sato does not disclose the specific thiophene as recited in claims 1-2 and 12-13.

Jonas teaches a solid electrolyte capacitor comprising polythiophene formed on the metal foils used as anodes, which is coated with an oxide coating ("dielectric film") (col. 2, lines 5-40). The polythiophene layer is formed onto the side of the anode coated with the oxide coating. The polythiophene is represented by formula (I), which has the same structures as some of the species recited in claims 1-2 and 12-13.

Jonas also teaches that the specific polythiophenes disclosed can be applied adherently in a particularly simple manner to the metal foils in electrolyte capacitors and provide capacitors with good electrical properties, low dielectric losses and low leakage currents (col. 1, lines 30-40).

Therefore, it would have been obvious to one of ordinary skill in the art to use the specific polythiophenes as claimed in Sato's electrolyte capacitors in order to provide the

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capacitors with good electrical properties, low dielectric losses and low leakage currents, as taught by Jonas.

Allowable Subject Matter

3. Claims 4-5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling X. Xu whose telephone number is 571-272-1546. The examiner can normally be reached on 8:00 - 4:30 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah D. Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ling X. Xu
Examiner
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